

## Bud Covington

1 Uintah County Historical Society Meeting, April 9, 1983

Tape #113

Bud Covington (Bud): ...little above the Uinta Basin and one of the reasons that the early activity in the Uinta Basin continued to make history in reference to all of the events with which you are familiar. For example, politics and economics are always very closely interrelated. Nothing happens in politics without a cause, nothing happens in history without an economic cause, in addition to historical and socioeconomic causes. By this, what I mean to say, when you set things in a larger framework as that, all of the early migrations of the white man into the Uinta Basin were primarily a result of the tremendous interest in the minerals of this area.

Although agriculture was a prime source for the early Mormons in the Wasatch Front area, the exploitation of minerals were never really approved of by Brigham Young and his followers because of the fact that Brigham had a feeling that the people should stay with the land at least until they established a solid base for all of their activities. At a later date, mining activity developed in other parts of Utah. The early interest in the Uinta Basin was primarily because of the minerals.

So we say, "What minerals are these that we were interested in that caused people to come for thousands of miles, from the Salt Lake area, from places as far away as Canada and New England, from places as far away as South America, to see the unique minerals that are present here in this great Uinta Basin?" Well, we have a very unusual storehouse of hydrocarbons here. You are well aware of the oil shale which can be, and probably will be, a very important, significant source of oil in the future, providing economics are satisfactory. We have a tremendous source of tar sands here. We have coal. We had early mining in the copper industry. We had very early mining in the Gilsonite industry.

Prior to the mining of Gilsonite in the Uinta Basin, Gilsonite was an unknown substance. So most of the focus of the activity in the early times in the Uinta Basin was focused upon the exploitation and exploration and development of the very unique minerals. So what I'd like to do today is just give you a brief review of and outline as to what has happened in the industry and in the Uinta Basin since the earliest times.

First of all, I'd like to explain a few things about these products and minerals so you know a little more about what we're talking about. This is Gilsonite. Many of you have seen it, some of you may not have. Gilsonite is a solid oil, solid hydrocarbon, derived from an oil source which is moved up in the vertical fractures in the earth until they become solidified. It has many uses. It is used in plastics; it is used in paints, high-grade varnishes; it's used as a base for India inks, high-grade printing inks; it's used in rubber products. When added to tires of rubber, it keeps them from checking under cold weather to where your tires don't break. Five percent of this material added to asphalt in a playground prevents accidents from being worse than they are. Bruises from children falling on asphalt are reduced significantly. It is used as undercoatings on cars. It's mixed with [the] material wallboard is made from it. At one time in the last decade, Gilsonite was used as a feeder-stock for gasoline, gas, gasohol, but the ore itself proved to be much too valuable to use as a source of gasoline. So this is one of the unique hydrocarbons found nowhere else in the world, mined nowhere else in the world except the Uinta Basin. One or two small deposits have been found in other countries, but nothing commercial.

Oil shale, we're all well aware of. Oil shale is shale which has a lot of highly organic material which, when ground, crushed and heated and retorted, can be converted into oil by a basic mineral known as carrageen. There is no oil in that block of shale right there, but if this were ground, crushed, heated and retarded, oil can be derived from it. The oil will then be a heavy, goopy oil which has to be up-graded.

Another one of the very unusual deposits found here in the Uinta Basin is tar sand, heavy, oil-impregnated sand. This is a sandstone with heavy, oil-impregnated saturation. This particular piece of rock here is similar to what is found up here in the quarry in the county pit. This stuff here will average about one barrel of oil per ton of material.

Unintelligible question.

This is asphalt, also called heavy, oil-impregnated sandstone, sometimes called tar sandstone. This oil here is the sandstone from which the lighter ends have escaped, leaving the heavy oils left. I'd like to show you this. This is a bottle of oil from a well we're producing out of the Pleasant Valley area. It has a pour point of 100 degrees. If the temperature is under 100 degrees, you can walk on it because of the high viscosity. The high viscosity is a result of a high paraffin content. The high paraffin content is a direct relation to the source-bed of this oil, which is organic shale similar to this. So these two are interrelated. This product here is interrelated to all three. This mother-source is highly organic material like this ... prototype oil like this into the veins and solidified into the Gilsonite.

Then another important mineral which was found in the early days, and mined in the early days of Uinta Basin, is copper. The Dyer Mine, north of Vernal, produced some very high-grade copper ore. This is a piece of copper ore that runs about sixty percent copper. This particular type of ore is called [malachite], it's a copper-carbonate. The way they handled this ore in the early days was to mine it, grind it and crush it, treat it with acid and then precipitate the copper by putting iron filings and scrap iron into the acid which would precipitate them into copper. This particular piece of copper here is refined copper. It was not produced that way, but it was produced partly that way. It was produced with the acid, then reduced by electrolysis product and made into about 99 percent pure copper from ore similar to this.

Well, these were the primary minerals, plus coal. I didn't bring a piece of coal because I found my hands so full. I couldn't find a box to put it in. You've all seen coal, especially you people, furnace and use coal in many different ways. You're all familiar with coal around the Uinta Basin here, especially up in Coal Mine Basin. But coal was another important product of the area from which the economy of this country began to derive its strength at the same time the agriculture base was building up.

So having presented some of these minerals as friends of the Uinta Basin and members of your society ... our own personal use, I'm sure that they are members because they're all affected directly or indirectly by the use by their industry. We haven't phosphate. Phosphate came in much later, much later development in the Basin here. So historically, these are the primary basis for the early mineral industry within the Uinta Basin.

On October 3, 1861, President Lincoln signed an order declaring the Uintah Valley an ill-defined area, an Indian Reservation consisting of approximately 2 million acres. All Indian lands and other areas within the state, titles of any other lands within the state at that time were completely extinguished. Shortly thereafter, about 1880, the White River Utes and the

Uncompahgre Utes living over in the Meeker area were vastly disturbed by the antics of one Nathan Meeker. Nathan Meeker was the Indian agent for the tribes of the Ute, the White River Indians. The Indians liked to raise horses. So they built a race track just west of the town of Meeker. Of course, Nathan Meeker was a very good, highly religious person and he did not think we should race on Sunday. Well, the Indians thought they should race on Sunday because Sunday was not an especially holy day to them. So they continued to race until finally Nathan Meeker said, "Well, we'll put an end to that." So he took his plows out there and he plowed up the racetrack.

The next day, of course, the Meeker Massacre occurred; and as a result of that, federal troops were sent to Meeker. On the way, fourteen of those troops were killed, one of them was General Thornburgh. As a result of that uprising, the killing of the federal troops, more federal troops were sent in and the White River Utes and the Uncompahgre Utes were moved to the Uinta Basin from the Colorado Reservation. At that time, they set up Ft. Thornburgh. It's an irony that the general who was sent to quell the uprising, that Ft. Thornburgh was named after him, which was vindicating. Well, Ft. Thornburgh was at the site of the present town of Ouray. That was in 1880.

In 1881, because of the problems of supply and demand and especially supplying the fort, they moved the fort to Ashley Creek, what was then called Hatch town, which is now Vernal. In 1886, Fort Duchesne was established. In 1888 a very curious thing happened. If you remember when I started talking, I mentioned the fact that all events have some economic basis. The understanding of those economic bases can make a lot of things look more clear. In 1888, there was a lot of pressure put on Congress because of the presence of Gilsonite veins in the Gusher area, present Ft. Duchesne area, to keep those Gilsonite veins out of the reservation, off the reservation of lands, so they could be exploited. This pressure became so great that an area was set aside, completely withdrawn from the reservation, known as "The Strip."

When this happened, that land became a no-man's land. It was not under the jurisdiction of the county, of the state, or of the federal government. As such, it became an outlaw's country and also became a den of gambling and prostitution. Liquor was being sold to Indians on the Strip, which was forbidden under the federal laws. As a result, the area, until 1906, was practically a small Las Vegas establishment. We drove a well just outside of Gusher here about ten years ago. While we were ... test had some time to walk around. Around the base of the cliff I found some remains of an old cabin. Around the cabin were thousands of broken bottles where the federal troops had come in and found bootleggers selling liquor in the early 1900s, 1894-6, to the Indians and had broken all of the bottles. There was very beautiful bottles, pieces you could piece together. They were all hand-blown bottles with hand-pressed necks, but I never found one crooked bottle among all this big mess of broken glass.

As I was walking away, I looked over the sagebrush and just happened to notice sitting in sagebrush was a perfect bottle that somebody had probably either thrown over his shoulder and landed in the sagebrush and was still perfect and I still have it. That bottle dates back to the time when this land out in the Gusher area was known as The Strip and was a direct result of Gilsonite mining operation out there. There was a carbon vein, a ... vein.

So where did Gilsonite get its name? Its name came from Sam Gilson. Sam Gilson was a man who rounded up wild horses. He promoted various mining ventures and when he came into the Uinta Basin and saw the Gilsonite, he was smart enough to start amassing claims and forming a company. At the formation of his company, he jokingly said, "I'd give anyone a silver dollar if they named the company after me." So they did, and the product became known as

Gilsonite for Sam Gilson, and the company was Gilson Asphaltum Company, which later became American Gilsonite Company

Another curious thing happened which backs up, again, this point of political pressure and economics. When the Castle Peak/Pariette areas south of Myton were found, another very extensive Gilsonite vein, called the Castle Peak/Pariette vein, just about the time this was discovered, the surveyors were trekking their way westward on a survey. Of course, compared to the locators, the potential locators, of this property, that if the lands were located within the reservation boundary, they would not be locatable and could not be opened for exploitations. So what did they do? They jogged up ahead of the surveyors and stopped them before they got to the area and a few dollars under the table and a few bottles of whiskey and probably an Indian blanket or two that they had gotten from the Indians, the surveyors jogged the line a mile north and as a result of that, the lands were left within the federal lands and out of the reservation. So that's how the Pariette/Castle Peak Gilsonite Mine got started.

In 1896, St. Louis mining in the Gusher area blew up. It blew so hard that even the windows in the town of Vernal rattled. In 1902 another thing happened in Congress, from political pressure from the whites, that affected the Indians on the reservation. The Raven Mining Company, which wasn't very far from the St. Louis group, petitioned Congress for permits to record claims on Indian lands. They got a special dispensation to record one hundred claims on Indian lands. Sixty-two were finally approved by Congress. This was within the reservation boundary. They just got a special deal that says, "You can have sixty-two mining claims within the reservation."

In 1905 the entire reservation was opened up for location. In the Vintiquin Canyon area over in Indian Canyon there were laterite veins. Laterite is similar to Gilsonite but it's a little different, it has a little different properties. Everybody rushed to the land. Here's the strange thing backing up the same point I'm hammering home on the basis of economics. In 1905 when they opened up these lands for recording, two years prior, Congress passed a law that the outnumbered sections which had been located prior to 1903 could be valid claims, or prior to 1891, could be valid claims. But in 1891 it wasn't legal to locate the claims, so how could they have a valid claim in 1891 if it wasn't legal to have them in 1891? So that shows you that politicians never make sense.

Okay, the first development of Gilsonite took place in the Dragon area south of Rainbow. The Gilson Asphaltum Company decided that the reserves in the Black Dragon Mine were sufficient to justify the building of a railroad. A railroad today costs about 1 million to 1.25 million dollars per mile. The railroad was built from Mack, Colorado, from the tracks of the Denver Rio Grande over Baxter Pass to the town of Dragon, down Dragon Canyon. The total cost of that railroad up over those high passes and Baxter Pass was \$230,000.

With the advent of the railroad, the Gilsonite mining at Black Dragon commenced. It would have been a strange sight if we'd go out there today to see the miners, because there's very little water in that area, so they were forbidden to take baths or use water for anything except for culinary use. To protect themselves from the Gilsonite, they'd coat themselves with mutton tallow. Then they would put powder on top of mutton tallow. Then the next day just apply a little more mutton tallow. After two to three to four weeks, they'd have a big crust of mutton tallow over them all and looked like people from outer space. I don't imagine they smelled too good, either.

The Gilsonite mining operations were really underway in the early 1900s in the Black Dragon. Later on, because of economics, the Rainbow area became more favorable and they

moved the railroad tracks further on to end at Watson, where they finally ended. From Watson to the White River stage, they built toll roads. From the White River up to Bonanza and Bonanza to Vernal they built toll roads. These roads were built all by the Gilson Asphaltum Company, and, of course, they charged a fee for the use of the roads for the stage and for the freighters to carry the merchandise to Vernal and to Ft. Duchesne and to Myton from the railroad terminal at Watson. The narrow gauge railroad at Watson, of course, was very unique in the fact that it was the steepest railroad on the North American continent. It had grades of 7.5 percent. The railroad locomotives were specially built by Baldwin Locomotive Company. They were built so that all of the weight in the engine, 82 percent of the weight of the engine, was under the twelve wheels of the engine to give it maximum traction on steep grades. It had hairpin curves such as they'd never even seen in the South American mining operations. As a result, when the railroad was abandoned in 1939, two of the engines went to Oregon and were then later shipped to South America. The other engines went to Guatemala where they're still in use on mining ventures. So the development of Gilsonite has progressed slowly, but thoroughly, over a period of many years, and is still with us and is still a major factor in the economic make-up of the entire Uinta Basin. Tar sand development was slow. Oil never came into real use until the early 1900s when the automobile became more popular and the gasoline engine came into effect. The advent of the discovery of oil in Rangely from the shallow wells in Rangely... Charlie Neal, who many of you know, was an early prospector for many of the ores including copper, gold, silver, oil and gas, oil shale, and even owned a refinery in Rangely.

I wanted to tell you one thing about the mining. You know, these miners with mutton tallow all over them were bringing down the tremendous wage at that time of \$3 a day, less 75 cents a day for their meals. They had to bring their own tent. These miners actually slept right out in the country out there. If you go out there today to the old area of Dragon, some of them were a little more astute than others and they had built themselves little rock shelters in which they would crawl at night, put rocks over the top of them, maybe a few boards to hold the rocks up. Some of those are still out there. You look at them, and you say, "Well, what do you suppose was stored in there?" They didn't store anything except themselves at night. If they didn't have a tent, they'd build a rock shelter and slept there. These were hardy people—they had to be to survive those times in those days. I thought that would be kind of an interesting side-note.

Unidentified man: How come we didn't have further development in this vein around the Gusher area?

Bud: That's a good question. In the Gusher area, the development started out pretty good. The vein was fairly wide, the walls were good. As they went down the vein, they began getting to soft, tarry-type stuff which, in the morning they'd come in and it was just like rolling up a carpet. They could just roll the soft, tarry Gilsonite up and throw it out. That wasn't the problem. As they went down a little further, they started getting quite a bit of water. The next thing they got was bad wall-rot. It started caving, heaving on them. So the economics at that time were not good, because they could go over to the Rainbow/Dragon area, and you've got no water at all, no wall-rot. So the water problems and the bad wall conditions as they went down in the vein were the reasons, economic considerations.

That's what we're trying to do today. American Gilsonite tried to work with them. American Gilsonite Company drilled two or three holes trying to see if they could establish a portion of that, and in future years, as the price of Gilsonite maybe moves up a little more, you

probably will see some more development over there. But it's not the most favorable area to develop, and it was much farther from the railroad.

I'd like to tell you a little about the oil and gas development. I have some photographs of Charlie Neal with his rig out here on Asphalt Ridge, the other side of Asphalt Ridge, out on the Twist. I also have another picture which he gave me which shows them. You know, today, the big trucks of R.W. Bob Jones and Utah Power and everybody go out there, and they have big wood trucks and move those rigs around. In those days, the moving of the rig with cable-tool rig, a small-type operation, pounding it into the ground, putting water under it, pounding it and bailing it out and pounding, the moving of the rig was done by a cowboy sitting on a horse with a line tied to the rig, wrapped around his horn. I have a picture of them actually moving a rig with the horses. Of course, the rig itself was put on a wagon, on skids, and the wagon and hauled that way.

But at any rate, many changes have taken place in the oil and gas from the early days of cable-tool to the advent of the rotary drilling, in which you put a bit on the end of it and you drill a hole and fill the hole full of mud and keep the cuttings from coming up to the surface. In the old days, you know, you always saw pictures in movies of them going out there, everyone standing there saying, "Hooray, my brand new \$50 hat is covered with oil!" You know, those days are gone forever because of the dangers of the blowouts killing people. So they control the wells by weighting where you don't see that happening anymore.

Unidentified woman: There's a picture.

Bud: Oh yeah, pass it around, you can take a look at it there. The development of oil took place starting in 1911-1915, then the first development in the Uinta Basin with oil was at Ashley Valley. Ashley Valley was 1925. [In] 1925, right outside of town here between here and Jensen, the Utah Oil Company drilled a well 1773 feet, formation which tested at a rate of fifteen million cubic feet of gas a day, which even today is a very large, good size gas well. Although our wells in Texas are likely to get 200-300 million cubic feet a day. But the average well out there in the Uinta Basin today is probably a half a million to a million cubic feet a day. Right out here, just outside of town in the Ashley Valley, the first well tested fifteen million cubic feet a day.

A line was laid after the early initial wells to Vernal, and Vernal had gas from that field until sometime after the start of WW II, I believe. At that time they depleted the gas and the line was abandoned. Then in 1948, after the development of the first deep test... By deep test [I mean] a well was drilled to 4200 feet into the Weber sand and discovered the Weber Pool at Ashley Valley. In 1945 this area was affected by the Rangely Pool, 1944 and early '43 because people who lived here, Rusty Thacker, could tell you that for sure, in 1944 and '45 when all the people who had moved into the Rangely area from the drilling of the Rangely field, there was no place to stay in Vernal, everything was crowded; it was a real boom at that time.

When I came to Vernal was right after the boom started to subside a little bit. But at one time there were 100 rigs drilling in the Rangely area, the Rangely field. That field is one of the fifteen largest oil fields in the United States. It has reserves that have already been drilled in excess of 750 million barrels of oil, three-quarters of a billion barrels of oil. So that field and the Ashley Valley field affected the economic growth in the history of this area because it brought new people in and brought new industry in and movement took place, advancing little by little.

Then we had development of the true drilling, the first real drilling outside of the Ashley Valley field in the Uinta Basin itself. Carter Wellcome, which was the exploration order for

Standard Oil Company of New Jersey, Exxon, the present Exxon Company, came in here in about 1944 and started an exploration program along Asphalt Ridge. So they drilled a series of seven wells along the ridge, found good shale, but nothing commercial. Then they drilled out in the Uinta Basin and the Roosevelt area and discovered the Roosevelt field and drilled in the Duchesne area and discovered production in the Duchesne field.

At that time that production for fractured shale was in this section right here. Fractures within the shale wells came in with 2500-3000 barrels a day, but dropped off very rapidly because the formation hadn't gotten much frosty and permeability. Frosty is like the number of rooms in a house. Permeability would be like the doors in those rooms. If you don't have those two factors, you can get some oil initially, a lot of oil, flush oil initially from the fractures, but you deplete it rapidly. So the movement here died off for a while, then came back in with the discovery and advent of Bluebell/Altamont by drilling deeper and in better zones than the general sands.

Today we are affected in our economic development and in the growth of this area by all of these minerals which are still being mined, still being produced, and which are still affecting us today. So the minerals of yesterday, one hundred years ago, 120 years ago, are still affecting us from the same economic broad basis that they were 120 years ago today. Thank you.